DISCOVERY OF NODES IN AN INTERCONNECTION FABRIC

By:

Whay S. Lee

Thomas M. Mortensen

ABSTRACT OF THE DISCLOSURE

[0067] A system and method for discovering nodes in an $M \times N$ torus interconnection fabric of nodes is provided. The method comprises probing an $M \times N$ torus interconnection fabric, wherein M and N are integer values and said interconnection fabric includes a first plurality of nodes forming an x-axis and a second plurality of nodes forming a y-axis; and identifying a location of a first node relative to the x and y axes. The computer system comprises an $M \times N$ array of nodes, wherein M and N are integer values; and a plurality of interconnects connecting the $M \times N$ array. A first plurality of nodes in the $M \times N$ array form an x-axis in the $M \times N$ array, a second plurality of nodes in the $M \times N$ array form a y-axis in the $M \times N$ array, and a first node in the $M \times N$ array is configured to probe the $M \times N$ array to identify a location of the first node relative to the x-axis and the y-axis.